

April 27, 1961

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Dear Robert:

Enclosed is the full text of the remark on the limits of resolution that I was asking you to comment on the other evening. The argument seems to me preposterous since it shifts the burden of image resolution to the formation of the flying spot. However, this fallacy seems to have been picked up in a few places, as I have seen it recorded. It might be worthwhile to make some direct comment about it.

The question does come up, however, how one should best go about studying the absorption characteristics of individual particles which are considerably smaller than the wavelength of the radiation. The particular case I have in mind myself, is the use of infrared in microscopy where one would like to be able to plot the infrared absorption spectrum, say in the region of three to four microns of particles that are no more than one micron in diameter. There must be an analogous situation in the microwave region, and I would hope that it might be fruitful in this connection.

Yours sincerely,

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